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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO | |
|---|---|----------------------|---------------------|-----------------|--|
| 10/522,321 | 07/06/2005 | Keith Biggadike | PG4858USw | 8829 | |
| 23347 GLAXOSMIT | 23347 7590 08/16/2007 | | | EXAMINER | |
| CORPORATE INTELLECTUAL PROPERTY, MAI B475 | | | AULAKH, CHARANJIT | | |
| | MOORE DR., PO BOX 13398 EARCH TRIANGLE PARK, NC 27709-3398 | | ART UNIT | PAPER NUMBER | |
| | | | 1625 | | |
| | | | | | |
| | | | MAIL DATE | DELIVERY MODE | |
| | | | 08/16/2007 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | | |
|--|---|--|--|--|--|--|
| | 10/522,321 | BIGGADIKE ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Charanjit S. Aulakh | 1625 | | | | |
| The MAILING DATE of this communication app | pears on the cover sheet with the | correspondence address | | | | |
| Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPL' WHICHEVER IS LONGER, FROM THE MAILING D. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATIO 36(a). In no event, however, may a reply be ti will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONI | N. imely filed in the mailing date of this communication. ED (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 13 Ju | une 2007. | | | | | |
| 2a)⊠ This action is FINAL . 2b)☐ This | | | | | | |
| 3) Since this application is in condition for allowa | nce except for formal matters, pr | osecution as to the merits is | | | | |
| closed in accordance with the practice under E | Ex parte Quayle, 1935 C.D. 11, 4 | 53 O.G. 213. | | | | |
| Disposition of Claims | | | | | | |
| 4) Claim(s) <u>1-8,10-12,14 and 16-33</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdra | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6) Claim(s) <u>1-8, 10-12, 14 and 16-33</u> is/are reject | ed. | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/o | or election requirement. | | | | | |
| Application Papers | | | | | | |
| 9) ☐ The specification is objected to by the Examine | er. | | | | | |
| 10) The drawing(s) filed on is/are: a) acc | epted or b) objected to by the | Examiner. | | | | |
| Applicant may not request that any objection to the | * | , , | | | | |
| Replacement drawing sheet(s) including the correct | - · · · · · · · · · · · · · · · · · · · | , , , | | | | |
| 11) The oath or declaration is objected to by the Ex | kaminer. Note the attached Office | e Action or form PTO-152. | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) ☐ Acknowledgment is made of a claim for foreign | priority under 35 U.S.C. § 119(a | a)-(d) or (f). | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | |
| 1. Certified copies of the priority document | | | | | | |
| 2. Certified copies of the priority document3. Copies of the certified copies of the priority | | | | | | |
| Copies of the certified copies of the prio application from the International Burea | <u> </u> | red in this National Stage | | | | |
| * See the attached detailed Office action for a list | • | ed. | | | | |
| | 22 33 | | | | | |
| Attachment(s) | | | | | | |
| Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4) | | | | | |
| 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | 5) Notice of Informal 6) Other: | | | | | |
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Application/Control Number: 10/522,321 Page 2

Art Unit: 1625

DETAILED ACTION

1. According to paper filed on June 13, 2007, the applicants have canceled claim 9 and furthermore, have amended claims 1 and 12.

2. Claims 1-8, 10-12, 14 and 16-33 are now pending in the application.

Response to Arguments

3. Applicant's arguments filed on June 13, 2007 have been fully considered but they are not persuasive regarding enablement rejection. The applicants have amended claims to overcome all prior art rejections. In regard to enablement rejection, the examiner does not agree with the applicant's arguments that one skilled in the art is able to prepare solvates of the claimed compounds without any undue experimentation. On the other hand, the applicants admit on the record that "applicants have enabled one of ordinary skill in the art to prepare the claimed compounds, one of ordinary skill in the art can readily extrapolate such teachings to form solvates from such compounds". First of all, if it is true, then it would have been obvious to one skilled in the art to prepare these solvates. Secondly, the instant compounds are novel and not known in the prior art and therefore, without any teaching or guidance in the specification, it would require undue experimentation to select specific solvates with enhanced stability properties. In regard to methods of treatment using these compounds either alone or in combination with hundreds of thousands of other therapeutic agents, the examiner does not agree with the applicant's arguments that IC50 data unquestionably fulfills the enablement requirement and would enable one of ordinary skill in the art to conclude that the instant claims are enabled. There is no IC50 data in the specification using

Art Unit: 1625

either the instant compounds alone or in combination with any other therapeutic agent. There is lot of unpredictability of the outcome of combination treatment due to drug interaction. The combination with other agents of diverse mechanisms such as beta-2 anatgonists may compromise the therapeutic effect of instant compounds having beta-2 agonist activity. There are no working examples present showing efficacy of either instant compounds alone or in combination with any other agent in animal models of any disease condition. In absence of such teachings, guidance, presence of working examples and unpredictability, it would require undue experimentation.

Conclusion

4. Rejection of claims 1-8, 10-12, 14 and 16-33 under 35 U.S.C. 112, first paragraph is maintained for the reasons of record.

NEW GROUNDS OF REJECTION

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-8, 10-12, 14 and 16-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In independent claim 1, the applicants have amended claim 1 to delete the value of variable R1 as H. However, the proviso at the end of claim "when R1 is H " is confusing since the actual intent is not clear. Is it needed in view of the amendment?

Art Unit: 1625

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charanjit S. Aulakh whose telephone number is (571)272-0678. The examiner can normally be reached on Monday through Friday, 8:30 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres can be reached on (571)272-0867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/522,321

Art Unit: 1625

Page 5

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Charanjit S. Aulakh Primary Examiner Art Unit 1625